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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,012	09/10/2002	Lawrence E. Thieben	IN-5596	5726

26922 7590 01/07/2005

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EXAMINER	
FEELY, MICHAEL J	

ART UNIT	PAPER NUMBER
1712	

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/065,012	THIEBEN, LAWRENCE E.	
	Examiner	Art Unit	
	Michael J. Feely	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 13-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 13-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *0404*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on April 20, 2004 has been entered.

Pending Claims

Claims 1-11 and 13-21 are pending.

Specification

2. The disclosure is objected to because of the following informalities: paragraph [0019] of the Specification *(see page 6)* says, "The coating is further described in the following non-limiting examples;" however, there are no examples in the Specification. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-11 and 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osterhold et al. (US Pat. No. 5,906,864).

- *Regarding claims 1, 2, 7, 8, 11, 13, 14, 19, and 20*, Osterhold et al. disclose: ***(1)*** a coating composition comprising a primer coating for automotive refinish applications (Abstract; column 1, lines 3-10) cured at temperatures above 32°F and below 120°F (column 8, line 64 through column 9, line 16; see also column 2, lines 52-56); and ***(13)*** a method of forming a stable dispersion of pigment in a coating composition (Abstract; column 1, lines 3-10), said composition comprising:

(a) a film-forming polymer comprising an epoxide polymer having an equivalent weight between 170-900 (column 8, lines 22-26; column 7-36 and ***37-42***);

(b) a mixture of crosslinking agents selected from a group of preferable amines (column 3, lines 24-29) including mannich bases *(phenalkamines)* (column 3, lines 24-29; column 4, lines 7-17); and polyaminoamines *(polyamide functional compound)* (column 3, lines 24-29; column 4, lines 17-20); and

(c) one or more pigments (column 8, lines 42-47);

(2 & 14) wherein the epoxide polymer comprises an epoxy-terminated polyglycidyl ether of bisphenol A (column 8, lines 22-26; column 7-36 and ***37-42***);

(7, 8, 19 & 20) wherein the pigment is selected from the group consisting of *(see claims for list)* (column 8, lines 42-47); and

(11) wherein the coating is cured at ambient temperatures (column 8, line 64 through column 9, line 16; see also column 2, lines 52-56).

Osterhold et al. do not explicitly disclose, *"a mixture of crosslinking agents wherein at least one crosslinking agent is a polyamide functional compound and at least one crosslinking agent is a phenalkamine compound;"* rather, they disclose, "Conventional amines, preferably polyamines, epoxy/amine adducts, ***mannich bases, polyamidoamines*** and preferably epoxy/aminourethane adducts may be used, as amine hardeners in the aqueous coating compositions according to the invention, ***either alone or as blends***," (column 3, lines 24-29). The description of the *mannich bases (see column 4, lines 7-17)* satisfies the "phenalkamine" requirement, and the description of *polyamidoamines (see column 4, lines 17-20)* satisfies the "polyamide functional compound" requirement.

The list of materials provided by Osterhold et al. to form a blend is relatively small. Hence, it would be reasonable to expect that one skilled in the art would chose a blend of a mannich base (phenalkamine) and polyamidoamine (polyamide functional compound) as an amine hardener blend in their coating composition.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a mixture of crosslinking agents featuring at least one polyamide functional compound and at least one phenalkamine compound in the composition of Osterhold et al. because Osterhold et al. disclose the use of amine hardener blends wherein the amine hardener candidates are selected from a relatively small list including mannich bases and polyamidoamines.

- *Regarding claims 3-6, 9, 15-18, and 21*, the claim limitations provide specific quantities of phenalkamine and polyamide functional compound based on the total crosslinker weight. The following is a summary of these limitations:

Claim Number	*Phenalkamine %*	*Polyamide Functional Compound %*
Claims 3 & 15	2% to 98%	2% to 98%
Claims 4 & 16	40% to 98%	2% to 60%
Claims 5 & 17	50% to 98%	2% to 50%
Claims 6 & 18	40% to 60%	40% to 60%
Claims 9 & 21	40% to 98%	2% to 60%

Osterhold et al. do not discuss the specific quantities in their amine hardener blends; however, it should be noted that Applicant fails to demonstrate criticality for these claimed ranges *(see paragraph [0013] of the Specification)*. Rather, Applicant merely discusses preferable ranges. Furthermore, one skilled in the art would have recognized that crosslinker quantities are result effective variables that dictate the level of curing (crosslinking) in the overall coating composition.

In light of this, it has been found that, "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation," – *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955), and, "A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation," – *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the quantities of the individual amine hardeners in the amine hardener blend of Osterhold et al. because the crosslinker quantities are result effective variables that dictate the level of curing (crosslinking) in the overall coating composition.

- *Regarding claim 10*, Osterhold et al. are silent regarding *the presence of pigment being in the range of 32% to 52% by weight, based on the total solids weight of the coating composition*; however, it should be noted that Applicant fails to show criticality for this range *(see paragraphs [0014] to [0015] of the Specification)*. Rather, Applicant merely discusses a preferable range. Furthermore, one skilled in the art would have recognized that pigment quantity is a result effective variable that dictates adequate coloring properties and processabilty of the coating composition.

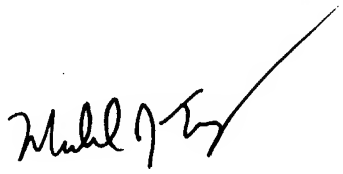
Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize the quantity of pigment in the composition of Osterhold et al. because the pigment quantity is a result effective variable that dictates adequate coloring properties and processabilty of the coating composition.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael J. Feely
Patent Examiner
Art Unit 1712

January 5, 2005